



# Search and Order ASTER and MODIS Data through the LP DAAC Data Pool

Earth-Sun System Division,

Land Processes Data and Services in partnership with the U.S. Geological Survey

USGS Earth Resources Observation and Science (EROS)

http://lpdaac.usgs.gov/main.asp

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#### Overview

- The Data Pool is an online archive providing direct FTP access to selected LP DAAC data products.
- The Data Pool contains ASTER L1B V003 data covering the US and its territories and global MODIS data.
- MODIS daily products are retained for 4 days; all others are retained for at least 12 months.
- ASTER products are retained indefinitely.

# Overview (cont.)

- You may search the Data Pool by using a simple "Drill-Down" web interface to quickly locate data of interest.
- The Data Pool also offers immediate FTP access to selected LP DAAC data products.
- You may view Metadata and browse data (if available) through your browser.

# Available ASTER Data Types

#### **ASTER**

- The LP DAAC Data Pool contains Version 3 L1B Registered Radiance at the Sensor (AST\_L1B) granules over the United States and its territories only.
- The temporal extent of ASTER L1B data is from March of 2000 to the present.
- ASTER L1B data downloaded from the LP DAAC Data Pool is available without charge.

# Available MODIS Data Types

#### **MODIS Aqua & Terra**

- The temporal extent of MODIS data varies according to data type.
- MODIS daily data are available for up to 4 days;
   MODIS composite data are available for approximately 1 year.
- MODIS Datasets available

# Data Delivery

#### **Delivery options include:**

- FTP
- CD
- DVD
- Digital Linear Tape (DLT)



Search and Order Options
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MODIS granule of drought conditions in Southwest Australia

# Search and Order Options

Begin your data search at the LP DAAC homepage:

Click the "Data Pool" link to go to the LP DAAC Data Pool.

LP DAAC URL: <a href="http://lpdaac.usgs.gov/main.asp">http://lpdaac.usgs.gov/main.asp</a>



#### To search the LP DAAC Data Pool:

Click the "SEARCH Data Pool" button.

NOTE: Searching the Data Pool is also referred to as the "Drill-Down Method."

Data Pool URL: <a href="http://LPDAAC.usgs.gov/datapool/datapool.asp">http://LPDAAC.usgs.gov/datapool/datapool.asp</a>



#### The data sets are organized by data group names.

 Select your desired instrument by using the links located in the "Data Group" column.



#### **Drill-Down Search Parameters**

- Spatial Coverage through a java map
  - Pan and Zoom to your area of interest
  - Use rectangle or polygon spatial extent options to cover your area of interest
- Date options available
  - Date selection links are available for day, week, month and year
- Day/Night Flag
- Science\_QA (Quality) Flag

**Note:** At any time, the search options may be skipped and you can retrieve the granules matching the current criteria.

Please use the links below for LP DAAC Data Pool Search and Order Instructions for ASTER or MODIS data:

- ASTER
- MODIS



ASTER L1B granule of Dell Rapids, South Dakota

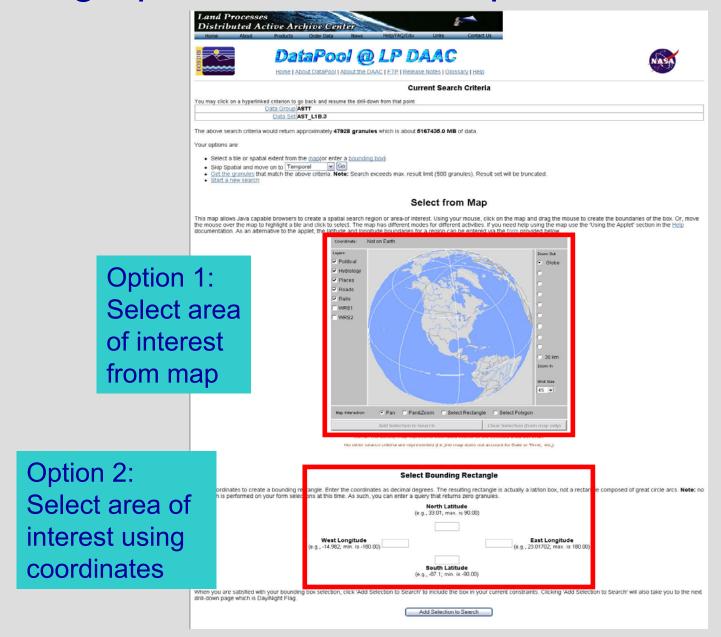
#### ASTER Search and Order

#### To begin your ASTER Search and Order:

- Select the ASTER instrument from the link in the "Data Group" column.
- Select the AST\_L1B.3 link in the Data Set column.

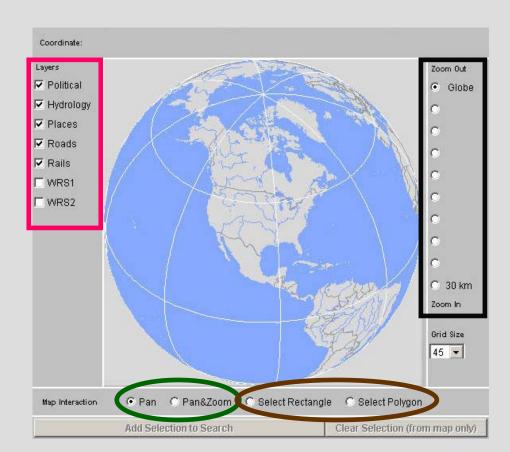


#### **Using Spatial Constraint Options**



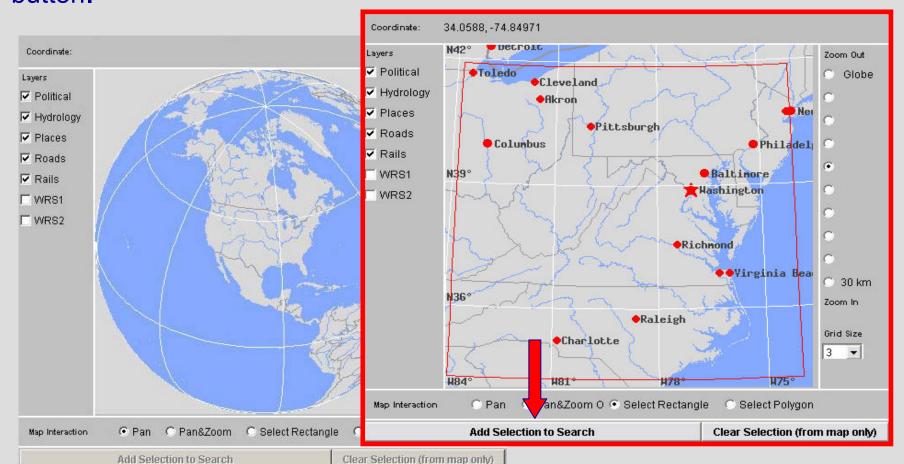
#### OPTION 1: Select area of interest from the map.

- Use layer boxes to display map features.
- Use zoom feature to view map up to 30 km.
- Use "Pan" and "Pan&Zoom" features to rotate map and see greater detail.
- Use "Select Rectangle" and "Select Polygon" features to select your area of interest.



#### OPTION 1: Select area of interest from the map.

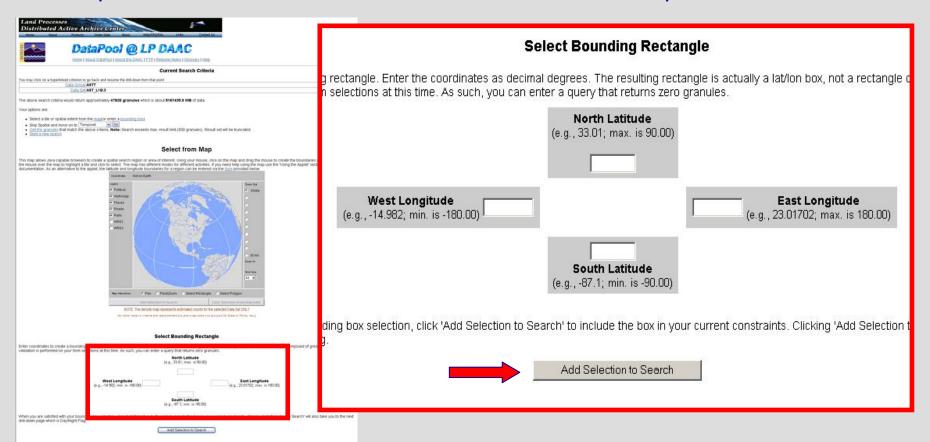
- Use the "Select Rectangle" feature to click and drag a rectangle over your area of interest.
- Use the "Select Polygon" feature to click points around your area of interest.
- Once you have selected your area of interest, click the "Add Selection to Search" button.



#### Option 2: Select area of interest using coordinates.

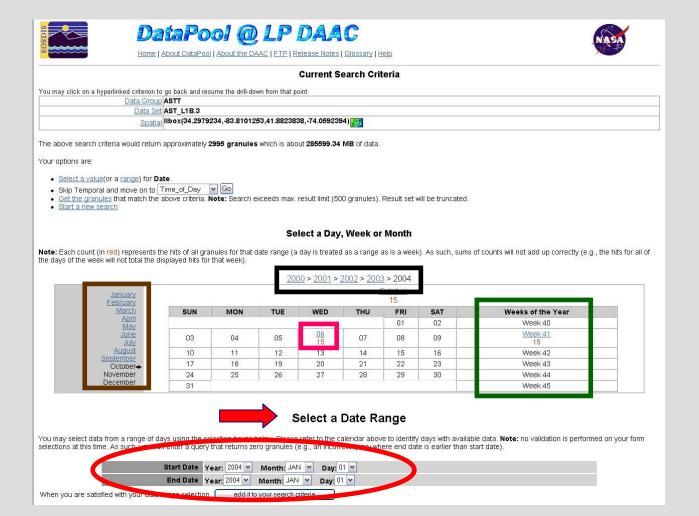
- Enter your coordinates of your area of interest to create a bounding rectangle.
- Once you have selected your area of interest, click the "Add Selection to Search" button.

**NOTE:** Remember to include a "-" (hyphen) in front of longitude coordinates in the Western Hemisphere and latitude coordinates in the Southern Hemisphere.



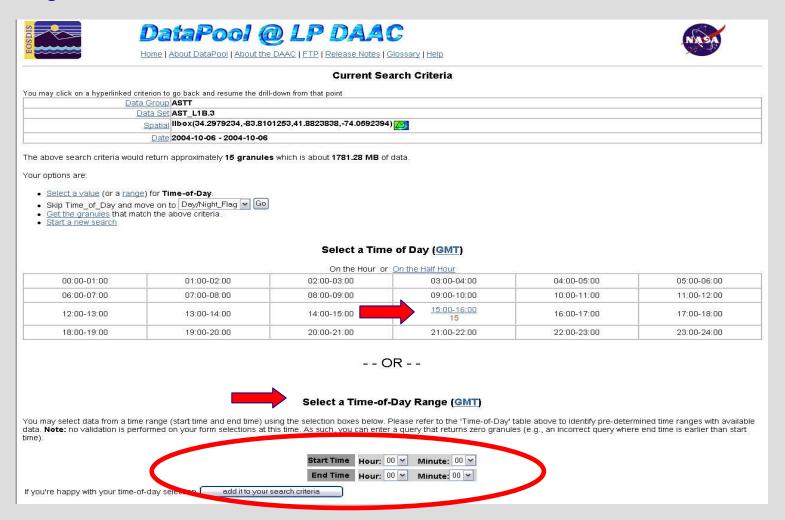
#### To select a date or a date range:

- Use the links to select day, week, month, and year.
- Use the drop down boxes under "Select a Date Range" to select a start date and end date. Click the "add it to your search criteria" button after selecting the date range.



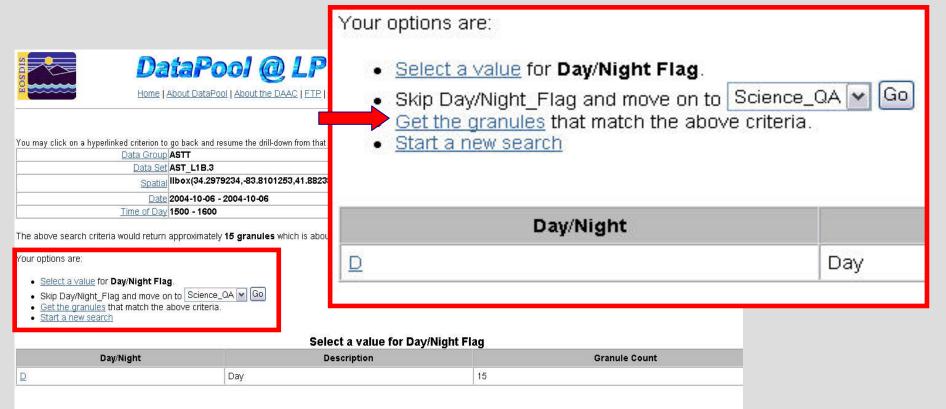
#### To select a time or a time range:

- Use the links to select the time of the day.
- Use the drop down boxes under "Select a Time of Day Range" to select a start time and end time. Click the "add it to your search criteria" button after selecting the time range.



#### Selecting the Day/Night Flag:

- The Day/Night Flag can be D (day), N (night), B (both), or X (not designated).
- If there is a single value listed under the Day/Night column, click the "Get the granules" link.
- If there are multiple values listed under the Day/Night column, select the desired Day/Night flag then select "Get the granules" on the next page.

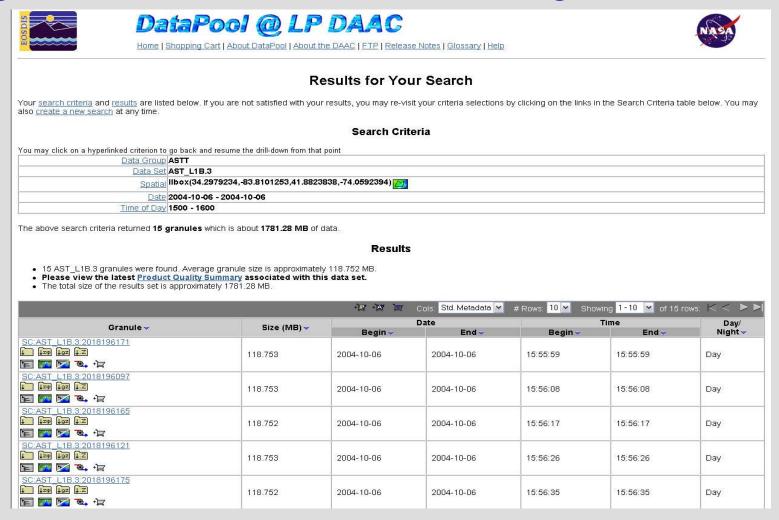


After you receive the results of your search, you may download the granules individually, or you may place selected granules in the shopping cart and order all of the selected granules at one time.

If available, use the Conversion Tool to convert data and order the granules individually. In the shopping cart, you may choose Conversion Tool for individual granules or apply it to all granules.

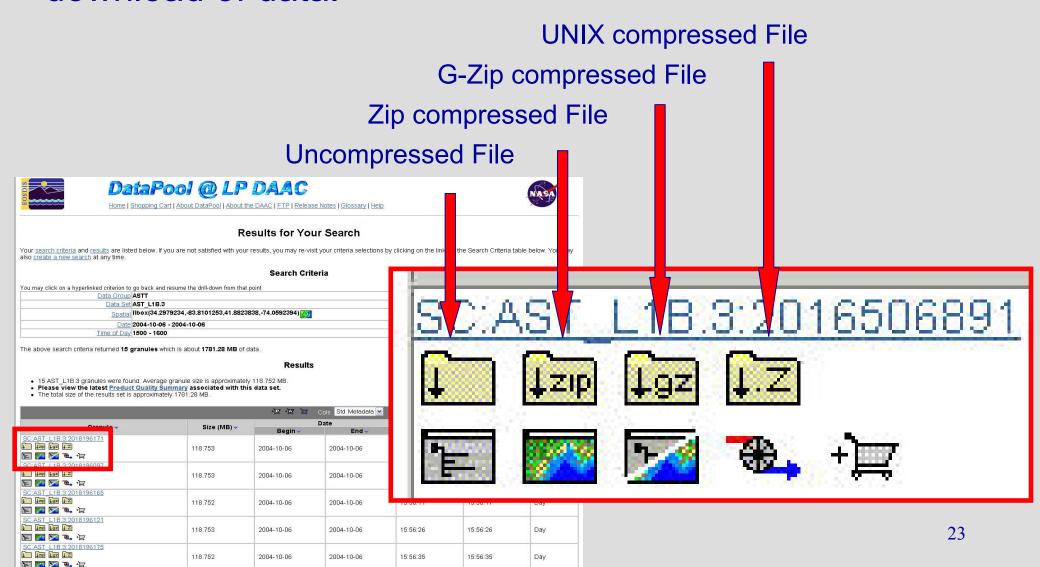
The following pages detail ordering granules individually or through the shopping cart.

#### Using the Tools on the Results Page

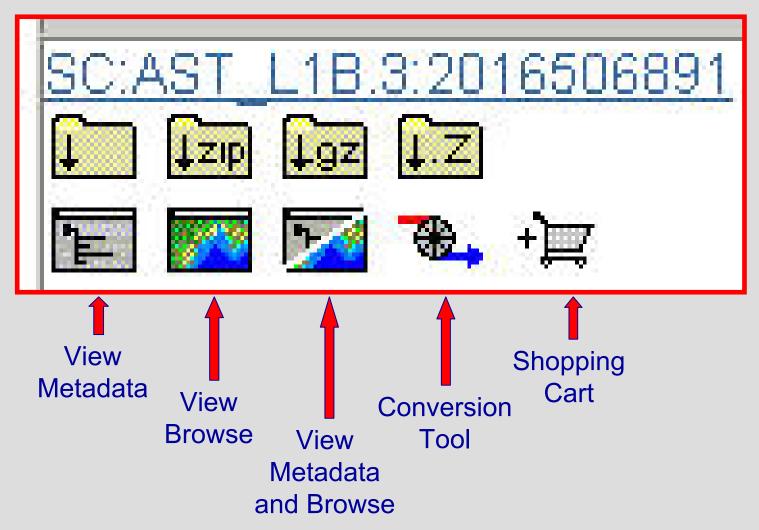


**NOTE:** The Granule ID from the LP DAAC Data Pool is not the same as the Granule ID from the EOS Data Gateway.

Selecting one of the individual folders allows immediate download of data.



#### Symbols on the Results Page



#### Using the Conversion Tool

Use the Conversion Tool to convert the format from a HDF file to a GeoTIFF file.

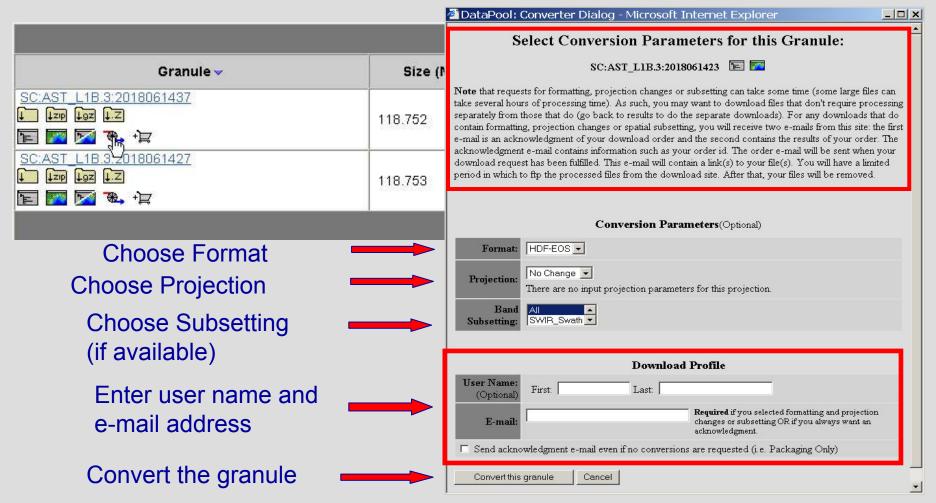
You may convert ASTER data to the Geographic projection.

You may convert MODIS data to Geographic, Polar Stereographic, or UTM projections. Only selected MODIS data sets may be subsetted.

**NOTE:** The Conversion Tool divides the selected granule into separate files for each band.

#### To apply the Conversion Tool to individual granules:

- Click the Conversion Tool icon.
- From the drop-down boxes, choose Format, Projection, and subsetting (if available). Enter your user name and e-mail address and click "Convert this granule."



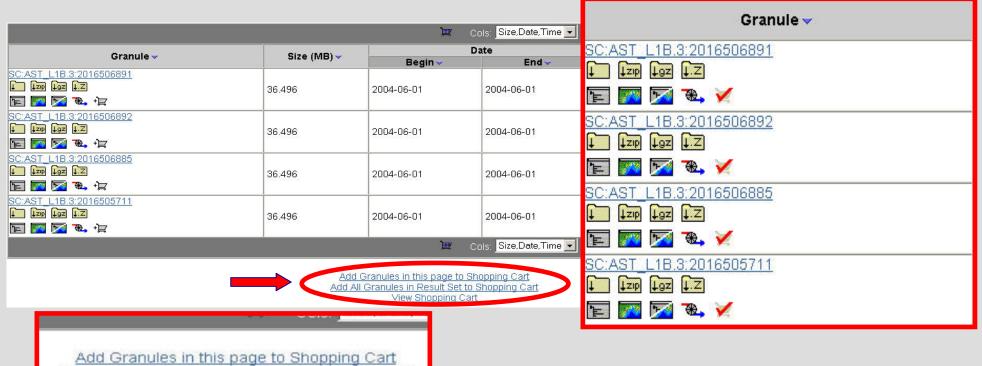
#### + Using the Shopping Basket + □

You may add granules to the Shopping Basket by selecting the granules individually or by using the Shopping Basket options at the bottom of the page.

NOTE: A red check denotes granules added to your shopping basket.

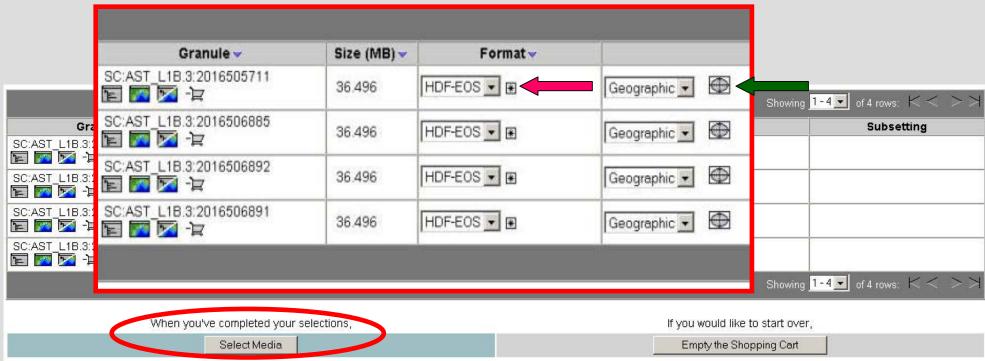
Add All Granules in Result Set to Shopping Cart

View Shopping Cart



#### + ☐ Viewing the Shopping Basket+ ☐

You may change the format and projection of individual granules with the appropriate drop-down boxes or use the **format icon** or the **projection icon** to apply the change to all of the granules in the shopping basket. When you are finished making your selections, click the "Select Media" button. **NOTE:** The subsetting option for an ASTER granule is only available if the bands from at least two telescopes were acquired.



#### To Complete a media order:

 Select the media option for your data by using the radio buttons in the far left column. Click the "OK" button after you have made your media selection.

**NOTE:** FTP download is the only available option to retrieve the data when the conversion tool is used.

#### **Media Options**

The media options shown below are an intersection of the options available for each data set represented in the shopping cart. Please choose a single media type.

Select One	Media Type	Media Format	Max. Size Limit (MB)	Min. Size Limit (MB)	Media Capacity (MB)	Max. Granule Counts
0	CDROM	RockRidge	800000.0	0.0	650.0	1000
C	DLT	TAR	800000.0	0.0	35000.0	1000
0	DVD	RockRidge	800000.0	0.0	4500.0	1000
0	8MM	TAR	800000.0	0.0	7500.0	1000
c	Download	Selectable Upon Order Notification	No Limit	No Limit	No Limit	No Limit



- Complete the required address information. You may use the contact icon if your shipping address is different than your contact address.
- Click the "Confirm Your Order" button after you have entered your address information.

ease enter packaging selections, <u>shipping address</u> ice the order is successfully submitted, your shopp	and <u>contact addre</u> ping cart will be emp	<u>ss</u> (if different from ship otied. Checkout selectio	oping address) belo ons will remain pers	ow. Once you have e istent during your se	entered the neces ession only. <mark>This p</mark>	sary information, please <u>confirm your orc</u> age cannot be bookmarked!!
		Pa	ckaging			
Includ	e metadata file(s)	2 C Yes € No				
	User Comment	5				
		Ad	dresses		_	
<b>Shipping</b>		<b>€</b> ☐ Contact				
No	te: You do not need	to enter a contact addres	s if the information is	s the same as the ship	ping address.	
	User Name	First:	Last		(Required)	
	E-mail				(Required)	
	Telephone				(Required)	
	Organization				(Optional)	
	Street Address				(Required)	
	City     State/Province	5	No		(Required) (Required)	
	Postal Code	<u> </u>	INO		(Required)	
	Country				(Required)	
When you'∨e finished your entrie	S,	To start over,	To	o change data conte	nt,	To change media selection,
Confirm Your Order		Clear Your Entries		Back to Cart		Back to Media

30

- Review your order on the "Confirm Your Order" page and click the "Please Submit Your Order" button if the information is correct.
- After you submit your order, the order acknowledgment screen will display.



#### To complete an order through FTP download:

- Complete the download profile and check the acknowledgment box for e-mail notification.
- Click the "Order the Data" button after you have completed the form.
- An order confirmation page will appear after you have ordered your data.



Please choose from the following links to continue the LP DAAC Data Pool tutorial:

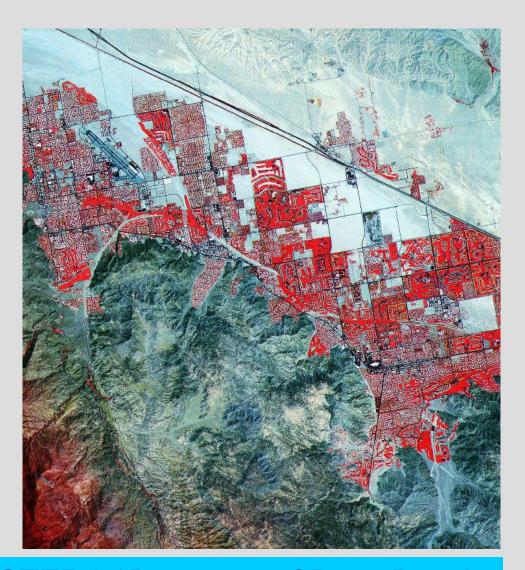
**MODIS Search and Order** 

**Direct FTP Access** 

Land Processes DAAC Contact
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<u>Information</u>

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ASTER L1B granule of Palm Beach, California

#### MODIS Search and Order

#### To begin your MODIS Search and Order:

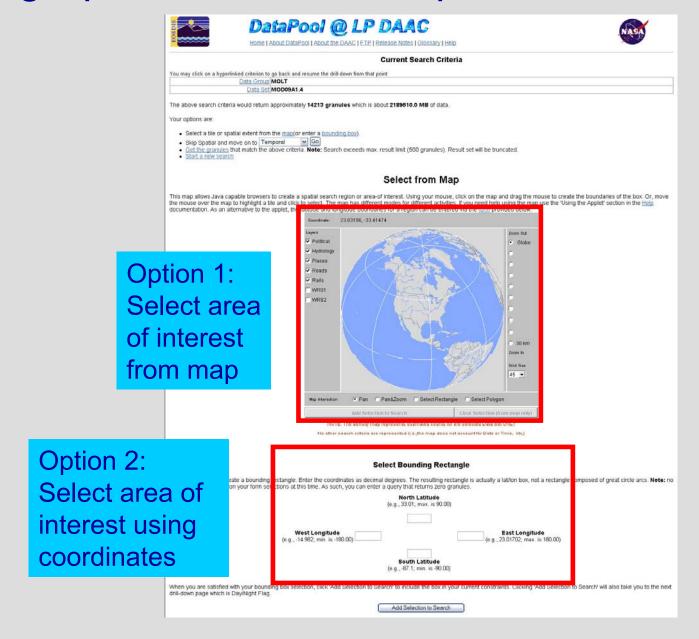
- Select the desired MODIS instrument by using the link in the "Data Group" column (the tutorial will detail an order from the MOLT data group).
- Select the desired MODIS data set in the Data Set column. Click <u>here</u> for MODIS data set descriptions.



Can't find what you want in DataPool? Search the whole archive using the EOS Data Gateway

# MODIS Search and Order (cont.)

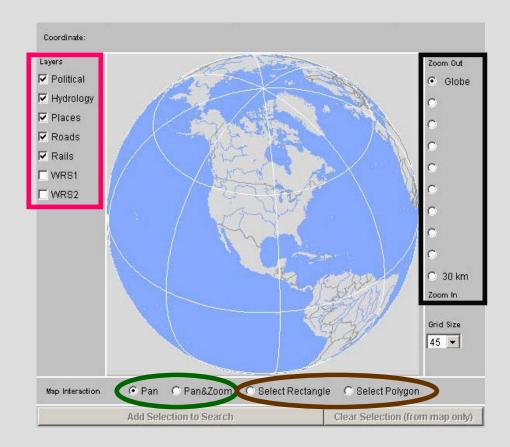
#### **Using Spatial Constraint Options**



# MODIS Search and Order (cont.)

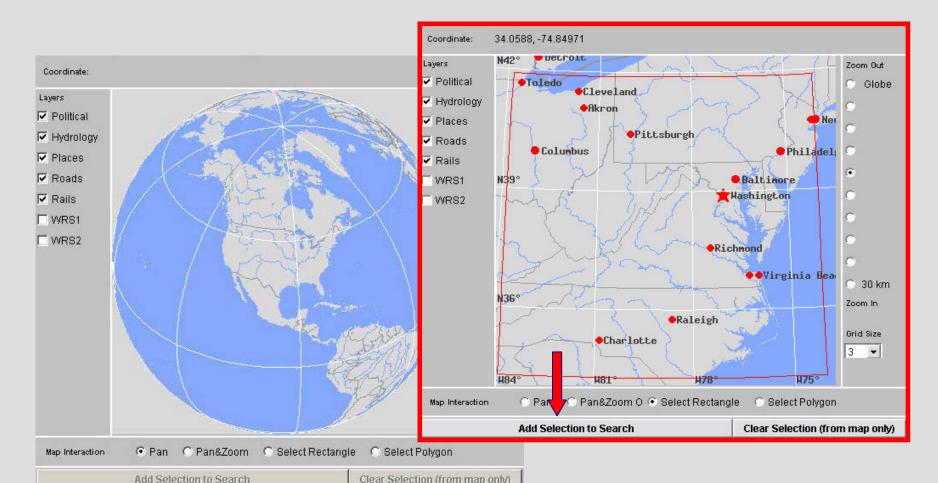
#### OPTION 1: Select area of interest from the map.

- Use layer boxes to display map features.
- Use zoom feature to view map up to 30 km.
- Use "Pan" and "Pan&Zoom" features to rotate map and see greater detail.
- Use "Select Rectangle" and "Select Polygon" features to select your area of interest.



#### OPTION 1: Select area of interest from the map.

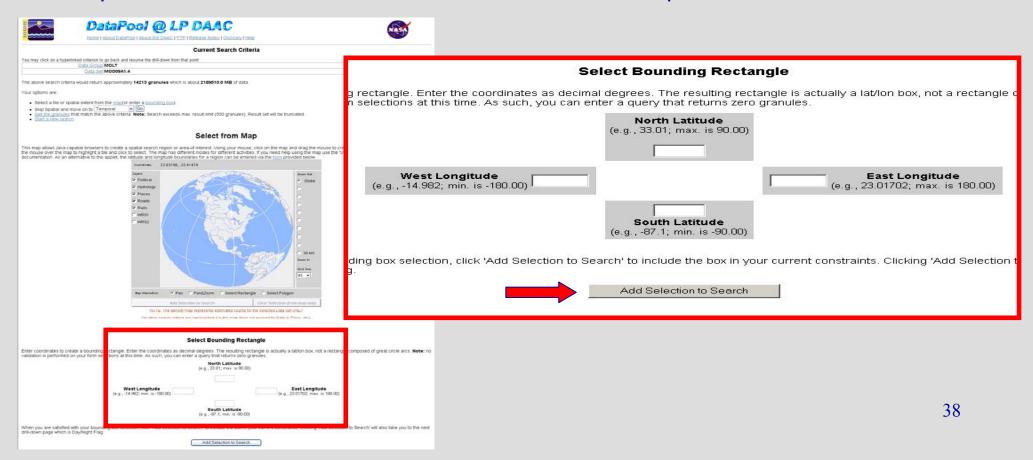
- Use the "Select Rectangle" feature to click and drag a rectangle covering your area of interest.
- Use the "Select Polygon" feature to click points around your area of interest.
- Once you have selected your area of interest, click the "Add Selection to Search" button.



#### Option 2: Select area of interest using coordinates.

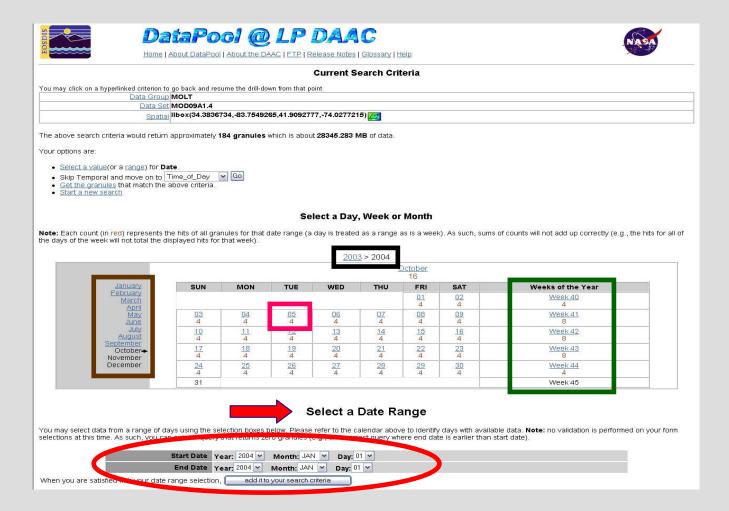
- Enter the coordinates of your area of interest to create a bounding rectangle.
- Once you have selected your area of interest, click the "Add Selection to Search" button.

**NOTE:** Remember to include a "-" (hyphen) in front of longitude coordinates in the Western Hemisphere and latitude coordinates in the Southern Hemisphere.



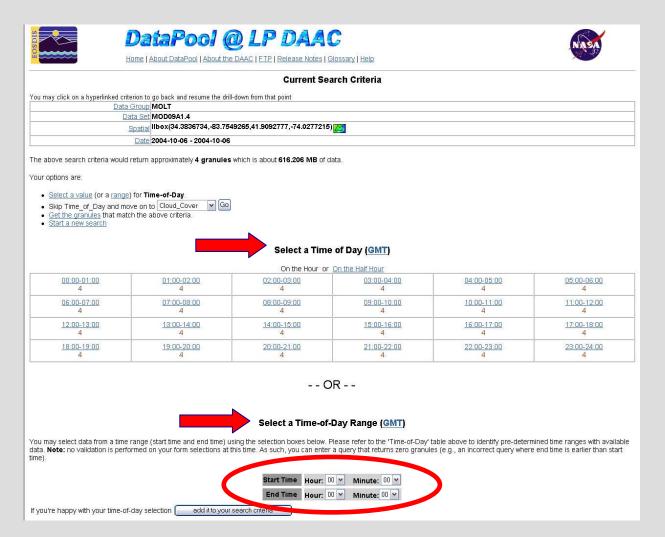
#### To select a date or a date range:

- Use the links to select day, week, month, and year.
- Use the drop down boxes under "Select a Date Range" to select a start date and end date. Click the "add it to your search criteria" button after selecting the date range.



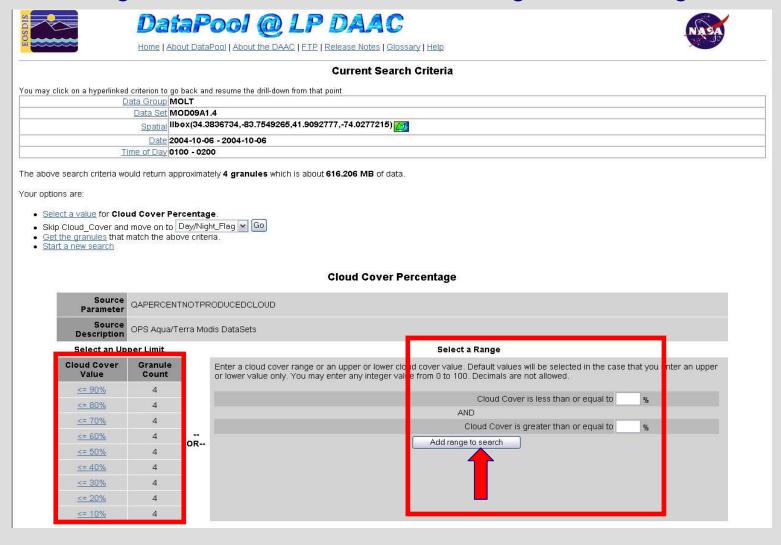
#### To select a time or a time range:

- Use the links to select the time of the day.
- Use the drop down boxes under "Select a Time of Day Range" to select a start time and end time. Click the "add it to your search criteria" button after selecting the time range.



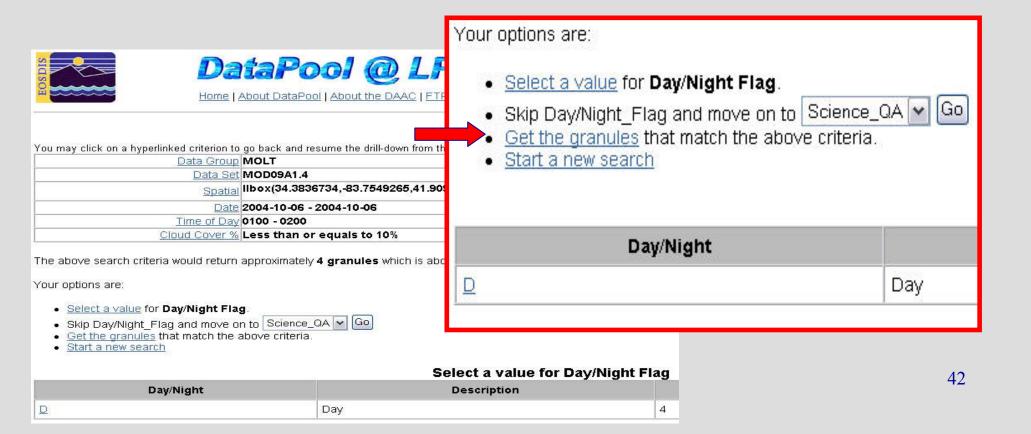
#### To select a cloud cover value or a cloud cover range:

- Use the links to select the upper limit percentage of the desired cloud cover value.
- Use the drop down boxes under "Select a Range" to select a cloud cover value. Click the "Add range to search" button after selecting the time range.



#### Selecting the Day/Night Flag:

- The Day/Night Flag can be D (day), N (night), B (both), or X (not designated).
- If there is a single value listed under the Day/Night column, click the "Get the granules" link.
- If there are multiple values listed under the Day/Night column, select the desired Day/Night flag then select "Get the granules" on the next page.

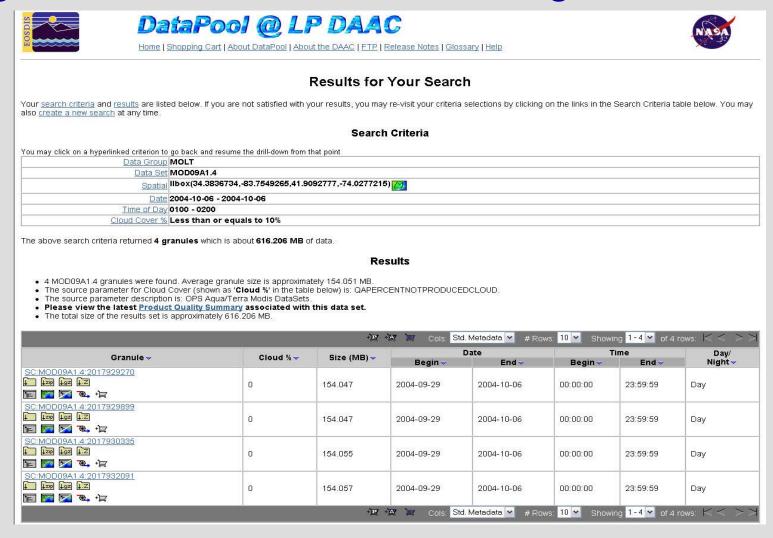


After you receive the results of your search, you may download the granules individually, or you may place selected granules in the shopping cart and order all of the selected granules at one time.

When available, use the Conversion Tool to convert data and order granules individually. In the shopping cart, you may use the Conversion Tool on individual granules or apply it to all granules.

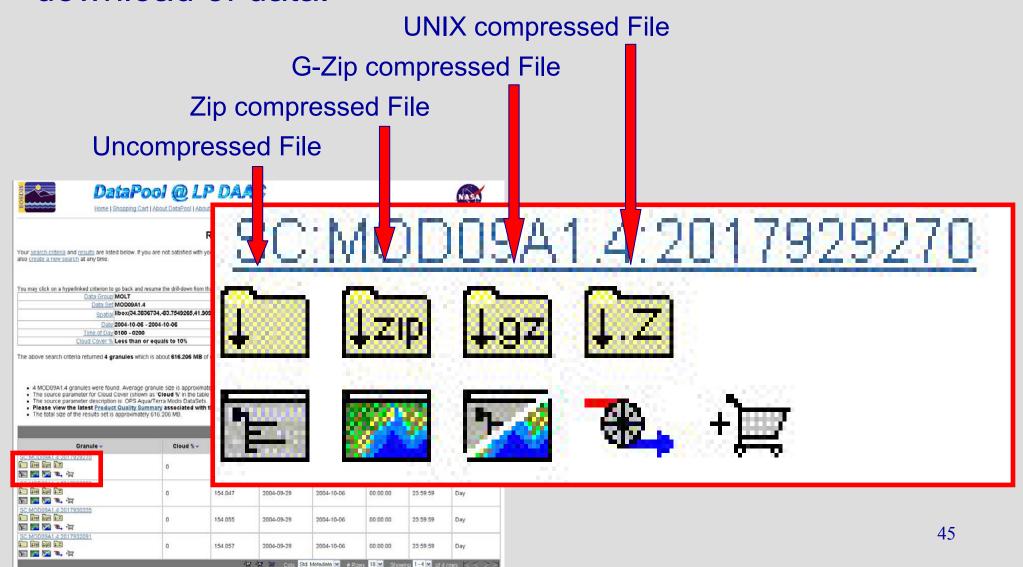
The following pages detail ordering granules individually or through the shopping cart.

#### Using the Tools on the Results Page

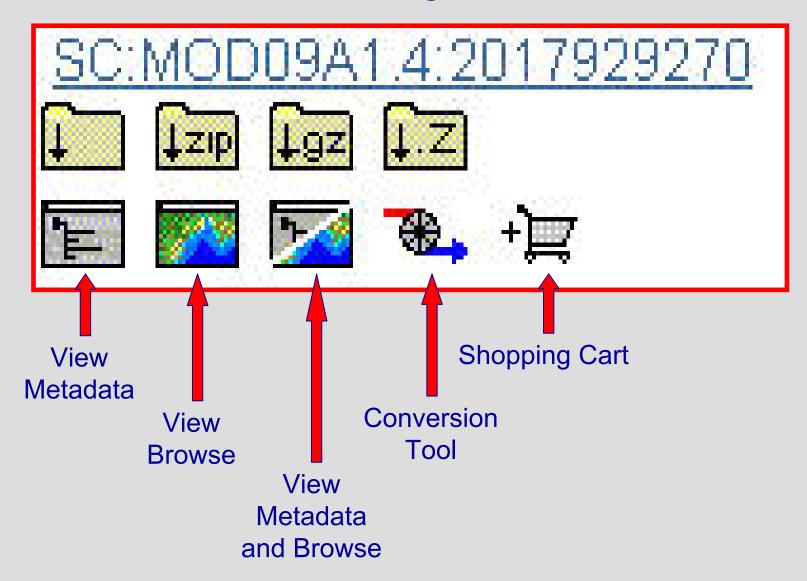


**NOTE:** The Granule ID from the LP DAAC Data Pool is not the same as the Granule ID from the EOS Data Gateway.

Selecting one of the individual folders allows immediate download of data.



#### Symbols on the Results Page



#### Using the Conversion Tool

Use the Conversion Tool to convert the format from a HDF file to a GeoTIFF file.

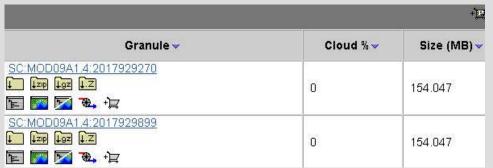
You may convert ASTER data to the Geographic projection.

You may convert MODIS data to Geographic, Polar Stereographic, or UTM projections. Only selected MODIS data sets may be subsetted.

**NOTE:** The Conversion Tool divides the selected granule into separate files for each band.

#### To apply the Conversion Tool to individual granules:

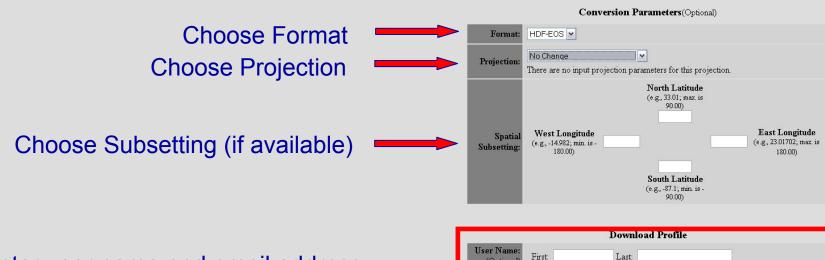
- · Click the Conversion Tool icon.
- From the drop-down boxes, choose Format, Projection, and subsetting (if available). Enter your user name and e-mail address and click "Convert this granule."



#### Select Conversion Parameters for this Granule: SC:MOD09A1.4:2017929270 🔄 🌌

Note that requests for formatting, projection changes or subsetting can take some time (some large files can take several hours of processing time). As such, you may want to download files that don't require processing separately from those that do (go back to results to do the separate downloads). For any downloads that do contain formatting, projection changes or spatial subsetting, you will receive two e-mails from this site: the first e-mail is an acknowledgment of your download order and the second contains the results of your order. The acknowledgment e-mail contains information such as your order id. The order e-mail will be sent when your download request has been fulfilled. This e-mail will contain a link(s) to your file(s). You will have a limited period in which to fip the processed files from the download site. After that, your files will be removed.

Send acknowledgment e-mail even if no conversions are requested (i.e. Packaging Only)



(Optiona

E-mail

Convert this granule

Required if you selected formatting and projection

changes or subsetting OR if you always want an

Enter user name and email address.

#### + ☐ Using the Shopping Basket + ☐

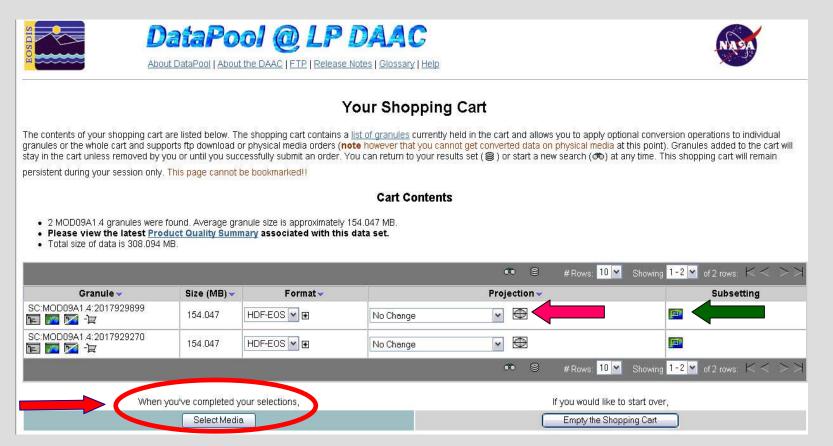
You may add granules to the Shopping Basket by selecting the granules individually or by using the Shopping Basket options at the bottom of the page.

**NOTE:** A red check denotes granules added to the shopping basket.



#### + □ Viewing the Shopping Basket + □

You may change the format and projection of individual granules with the appropriate drop-down boxes or use the format icon or the projection icon to apply the change to all of the granules in the shopping basket. When you are finished making your selections, click the "Select Media" button.



#### To Complete a media order:

 Select the media option for your data by using the radio buttons in the far left column. Click the "OK" button after you have made your media selection.

**NOTE:** FTP download is the only available option to retrieve the data when the conversion tool is used.

#### **Media Options**

The media options shown below are an intersection of the options available for each data set represented in the shopping cart. Please choose a single media type.

Select One	Media Type	Media Format	Max. Size Limit (MB)	Min. Size Limit (MB)	Media Capacity (MB)	Max. Granule Counts
C	CDROM	RockRidge	800000.0	0.0	650.0	1000
C	DLT	TAR	800000.0	0.0	35000.0	1000
С	DVD	RockRidge	800000.0	0.0	4500.0	1000
О	8MM	TAR	800000.0	0.0	7500.0	1000
0	Download	Selectable Upon Order Notification	No Limit	No Limit	No Limit	No Limit



- Complete the required address information. You may use the contact icon if your shipping address is different than your contact address.
- Click the "Confirm Your Order" button after you have entered your address information.

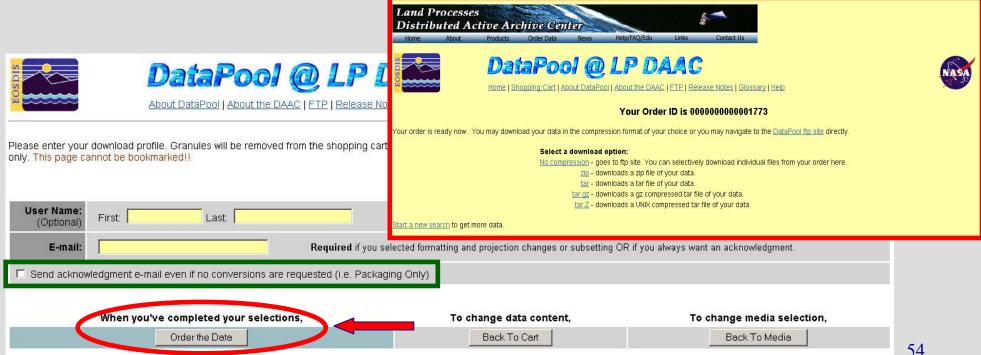
		Packagi	<u>n</u>		
Include metadata	file(s)? C Yes	€ No			
User Co	mments				
		Address	205		
₹ Shipping			5-53		
Note: You do n	ot need to enter a c	ontact address if the i	information is the same as	the shipping address.	
User N	ame First	Last:		(Required)	
E-	mail			(Required)	
Teleph	one			(Required)	
Organiza	tion			(Optional)	
Street Add	ress			(Required)	
	City			(Required)	
State/Provi	ince		None 🔽	(Required)	
Postal C	ode			(Required)	
	intry			(Required)	

- Review your order on the "Confirm Your Order" page and click the "Please Submit Your Order" button if the information is correct.
- After you submit your order, the order acknowledgment screen will display.



#### To complete an order through FTP download:

- Complete the download profile and check the acknowledgment box for e-mail notification.
- Click the "Order the Data" button after you have completed the form.
- An order confirmation page will appear after you have ordered your data.

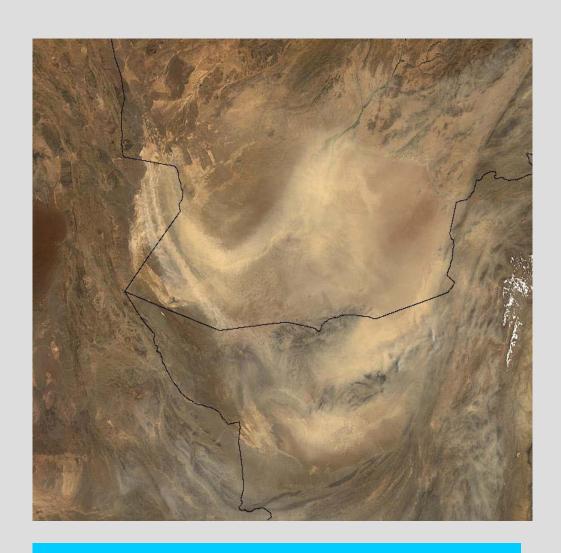


Please choose from the following links to continue the LP DAAC Data Pool tutorial:

**Direct FTP Access** 

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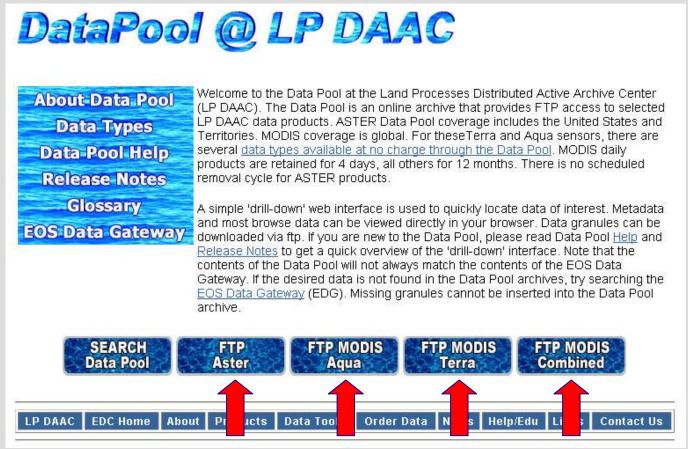


MODIS granule of a dust storm in Afghanistan

#### Direct FTP Access

You may download data through direct FTP by navigating to the desired granule(s), metadata file(s), and/or browse image(s). You may click the arrowed ASTER or MODIS buttons to begin FTP download.

**NOTE:** With direct FTP access, the data is only available as an uncompressed file(s) in HDF format.



# Direct FTP Access (cont.)

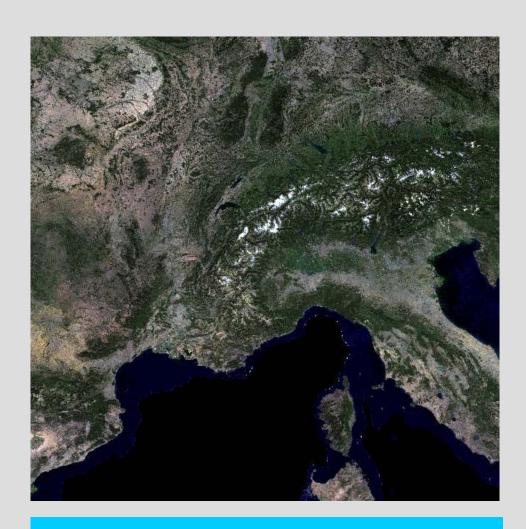
The directory structure for direct FTP access in the LP DAAC is as follows:

- Data group
  - FTP ASTER
  - FTP MODIS Aqua
  - FTP MODIS Terra
  - FTP MODIS Combined
- Data set
- Acquisition Date
- Data granules
  - HDF file
  - XML document
  - JPEG (browse) image

# Direct FTP Access (cont.)

Please use the links below for LP DAAC Data Pool direct FTP access instructions for ASTER or MODIS data:

- ASTER
- MODIS

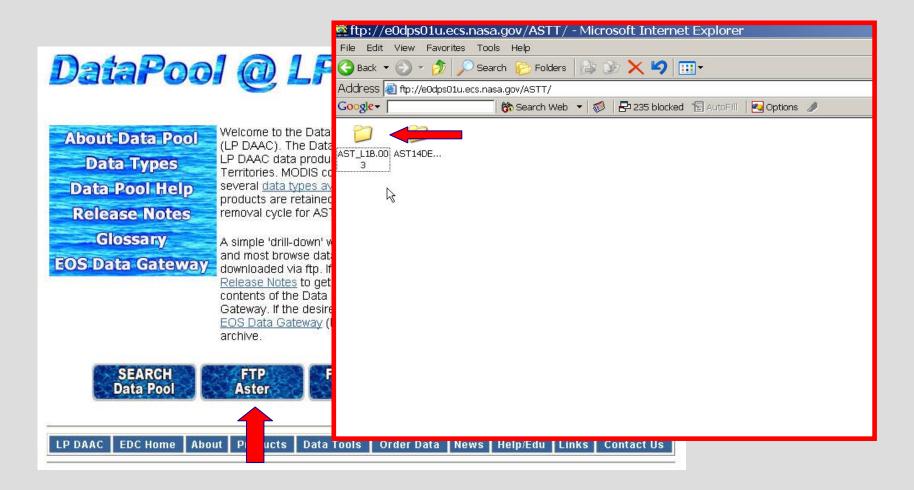


MODIS granule of Northern Italy and South-central Europe

#### **ASTER FTP Access**

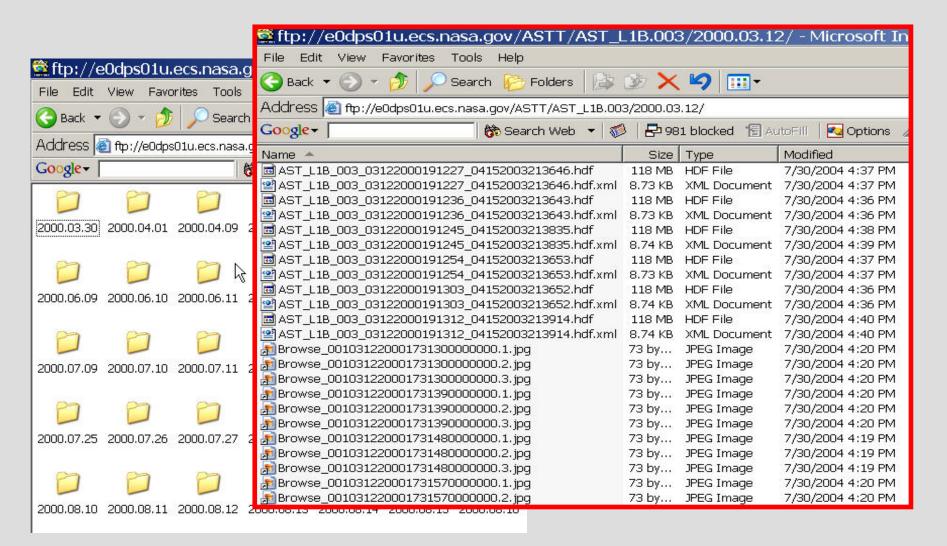
To download ASTER from the LP DAAC Data Pool through direct FTP access:

- Click the "FTP ASTER" link on the Data Pool homepage.
- Open the AST\_L1B.003 folder in your browser.



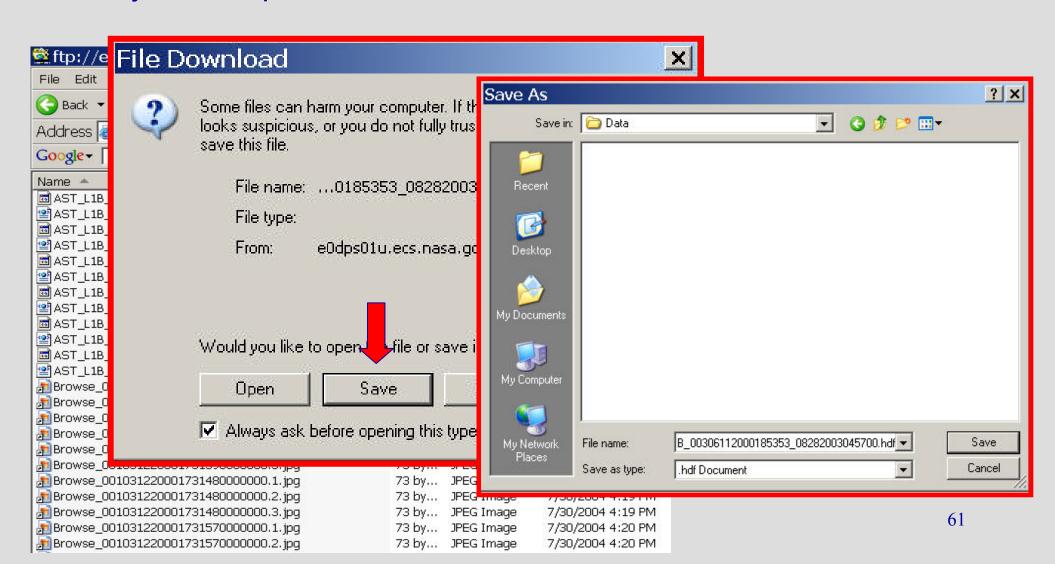
# ASTER FTP Access (cont.)

- Open the desired folder based on the acquisition date.
- Each folder contains the HDF file(s), XML document(s)
   (metadata), and JPEG (browse) image(s) for the acquisition date.



# ASTER FTP Access (cont.)

- Select your desired files for download.
- Click the "Save" button on the File Download window, and save the files to your computer.



# ASTER FTP Access (cont.)

Please choose from the following links to continue the LP DAAC Data Pool tutorial:

MODIS FTP Access

Land Processes DAAC

Contact Information

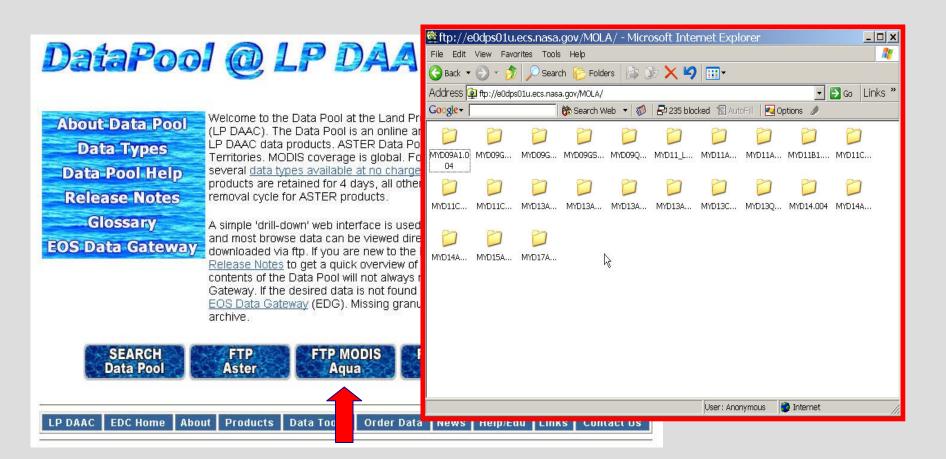
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ASTER L1B granule of Washington, D. C.

#### MODIS FTP Access

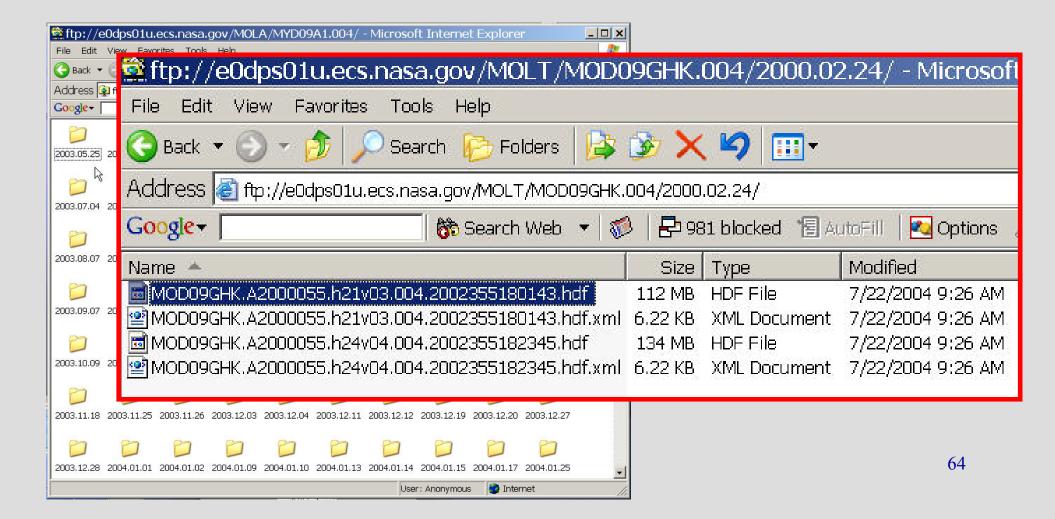
# To download MODIS from the LP DAAC Data Pool through direct FTP access:

- Click the desired "FTP MODIS" link on the Data Pool homepage (the tutorial will detail an order from the MODIS Aqua data group).
- Open the desired MODIS data set folder from your browser window. Click <u>here</u> for MODIS data set descriptions.



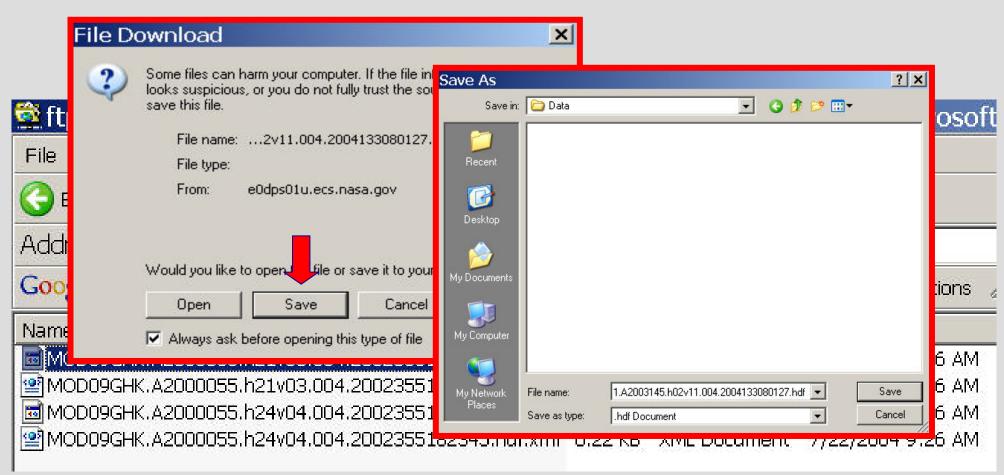
# MODIS FTP Access (cont.)

- Open the folder of interest based on your acquisition date.
- Each folder contains the HDF file(s), XML document(s)
   (metadata), and JPEG (browse) image(s) for the acquisition date.



# MODIS FTP Access (cont.)

- Select your desired files for download.
- Click the "Save" button on the File Download window, and save the files to your computer.



# MODIS FTP Access (cont.)

Please choose from the following links to continue the LP DAAC Data Pool tutorial:

Land Processes DAAC
Contact Information
Return to Index



MODIS granule of the Southeastern United States with interesting clouds

#### LP DAAC Contact Information

LP DAAC User Services

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